

**Canadian Natural Resources Limited
GENERAL PRESSURE VESSEL INFORMATION**

Job # 05.001541

District: Ft. St. John B.C.	Skid No.
Facility: Townsend Compressor Station.	Location (LSD): a-17-J / 94-B-9
Vessel Name Equipment Number: Inlet Separator	
Orientation: Horizontal	
Status: In Service	Regulatory Inspection

PRESSURE VESSEL NAMEPLATE DATA

"A" or "G" or "S" (Sask.) or BC Registration Number. A # 476352		CRN Number: P 8451.21	
Vessel serial number: 01-3584		Size: 52 in x 189 in	
Shell thickness: 44.5mm		Shell material: SA 516 70N	
Head thickness: 46.1mm		Head material: SA 516 70N	
Tube wall thickness:		Tube material:	
Tube diameter:		Tube length:	
Channel thickness:		Channel material:	
Design pressure	Shell: 1375 psi	Operating pressure	Shell:
	Tubes:		Tubes:
Design Temp.	Shell: 100 deg. F	Operating temperature	Shell:
	Tubes:		Tubes:
X-ray: RT-1		Heat treatment: Yes	
Code parameters: ASME VIII, Div 1		Coated: No	
Manufacturer: Opsco Ind		Year built: 2001	
Corrosion allowance: 3.2 mm		Manway: Yes	

PRESSURE SAFETY VALVE NAMEPLATE DATA

PSV Tag #	Manufacture	Model #	Serial #	Set Pressure	Capacity (scfm)	Set Date
8942F	Farris	26FA 13-120	439048-5-A10	9481 Kpa	8911 Scfm	06 / 05
CRN #	Service By	Block Valve	Location	Size	Code Stamp	
OG 2369.5C	Unified	No	Top Shell	1.5 x 2	UV	

SERVICE CONDITIONS-INDICATE ALL THAT APPLY

Sweet	<u>Sour</u>	Oil	<u>Gas</u>	<u>Water</u>
Amine	LPG	<u>Condensate</u>	Air	Glycol

Other (Describe):

Inspection Interval _____ **PSV Service Interval** _____

(Determined by MIC in conjunction with Chief Inspector following guidelines of CNRL's Owner-User Inspection Program)

Reports reviewed and accepted by:

Mechanical Integrity Coordinator _____ **Date** _____

Fill out all forms as completely as possible. All information is important! Use back of sheets to record additional information or sketch if required.
Copy of report to be filed by MIC at site, and copy sent to Chief Inspector

External Inspection Items	G	F	P	N/A	Comments
Insulation Verify sealed around manways, nozzles, no damage present, and there is no egress of moisture.				X	- Non insulated vessel.
External Condition Assess paint condition, areas peeling, record any corrosion, damage, etc (record location, size and depth of corrosion or damage)	X				Paint in good condition through out – no exposed metal – no previous corrosion.
Leakage Record any leakage at flanges, threaded joints, weep holes on repads, etc.	X				- No leakage noted.
Saddle: Assess condition of paint, fire protection, concrete. Look for corrosion, buckling, dents, etc. Look at vessel surface area near supports. Verify no signs of leakage at attachment to vessel and attachment welds are acceptable. Ground wire attached?	X				- No distortion to saddles – no Mechanical damage noted. - No corrosion at saddle to shell welds – no leaks. - Skid package is grounded.
Anchor Bolts Hammer tap to ensure secure. Look for cracking in treads or signs of deformation.	X				- All bolts tight and secure, no signs of deformation.
Concrete foundation Check for cracks, spalling, etc.				X	Steel skid.
Ladder / Platform Describe general condition, ensure support is secure to vessel, describe any hazards.				X	- No ladders or platforms.
Nozzle Assess paint, look for leakage, and ensure stud threads are fully engaged. Record any damage, deflection, etc. Are nozzles gusseted?	X				- No damage or deflection – no leakage noted. - No gussets. - All studs fully engaged to nuts – no short bolts.
Gauges Ensure gauges are visible, working, no leakage, and suitable for range of MAWP/ Temp.	X				- Temp gauge and pressure gauge attached – within range covered on data plate.
External Piping Ensure pipe is well supported. All clamps, supports, shoes, etc. in place. Look for evidence of structural overload, deflection, etc. Paint condition, external corrosion?	X				- Piping is well supported, no evidence of overload or deflection – all clamps in place. Paint is in good condition – no exposed metal – no corrosion.
Valving Ensure no leaks are visible. Valves are properly supported and chained if necessary.	X				- All valves supported, no leaks noted. - No chains required
PSV Ensure PSV is set at pressure at or below that of vessel.	X				Located on top shell – set at MAWP of vessel. Seal in place – no block valve – discharge piping same size as outlet orifice.
NDE methods Was UT/ MPI done on vessel (MI coordinator to review results)	X				Ultrasonic thickness inspection carried out, head metal thickness found below nominal minus corrosion allowance. Calculations carried out to ensure sufficient metal exists for safe operation.
<p>Recommendations or corrective actions : Vessel is Fit for Service or describe corrective actions required) (MIC to review corrective actions with Operations, discuss with Chief Inspector where necessary, and get remedial action implemented)</p> <p>Recommendations: No recommendations at this time.</p> <p>Summary: This vessel is in good overall condition, visual external and ultrasonic thickness inspection carried out – head metal thickness found below nominal minus corrosion allowance. Calculations carried out to ensure sufficient metal exists for safe operation.</p> <p>Vessel is fit for service.</p>					

Inspected By: Dellas Wiedman

Date: March 20 – 2008



Over view



Data Plate